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(54) DISPLAY DEICE AND IMAGE FORMING DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a display device and an image forming device for a copy ing machine, printer, facsimile device and a composite machine of them, by which a general operator different from a manager performing managing opera tion is prevented from performing a maloperation and the working efficiency by the manager is improved in an automatic clearing processing to change the setting of processing and the contents of display to be in a previously recorded standard state after a specified time elapses from the completing time of operation or the completing time of processing such as image forming processing.

SOLUTION: In a reset processing after performing an automatic clearing processing, reset confirming processing such as the display of information showing that a state after reset is control operation, the input requirement of a code line (password) and specified reset operation is performed as long as the state before performing the automatic clearing processing satisfies a specified condition that it is the control operation such as various kinds of setting.
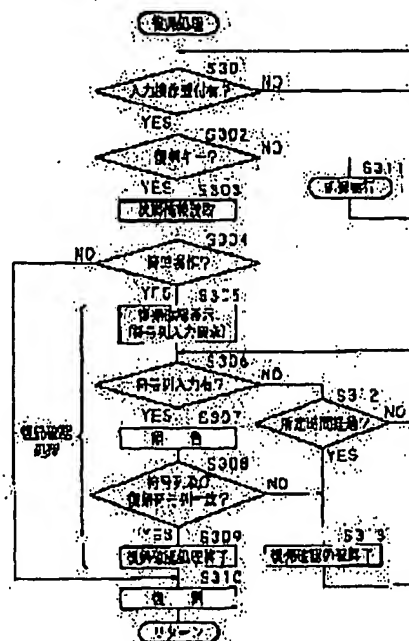
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DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention] When auto clear processing is especially performed during overhead operation, such as a setup of reference condition, about a display and image-formation equipments, such as the copying machine which performs auto clear processing of changing a processing setup and the contents of a display into the reference condition which has recorded beforehand after predetermined-time progress, a printer, facsimile apparatus, and these compound machines, from the completion time of the completion time of actuation, image-formation processing, etc. of processing, the operation mistake by the user who does not know overhead operation is related in this invention to the display and the image-formation equipment prevent.
[0002]
[Description of the Prior Art] With image formation equipments, such as a copying machine, a printer, facsimile apparatus, and these compound machines, a standby screen is outputted from completion of processings, such as the input by a user's key stroke to copy processing after predetermined time progress etc., i.e., initiation of an idle state, after predetermined time progress, and auto clear processing in which various processing setup is changed into reference condition is made.
[0003] Drawing 17 is a flow chart which shows auto clear processing of conventional image formation equipment. With image formation equipment, the existence of alter operation reception by the various keys which it has is detected (S1), when it is judged that alter operation is not received, it detects whether they are (S1:N) and an idle state (S2), and when it is an idle state, (S2:Y) and auto clear processing distinguish whether it is effective (S3). the case where auto clear processing distinguishes that it is effective in step S3 -- (S3:Y) and the time check which it has -- when it distinguished whether the predetermined auto clear processing execution time always clocked by the section would have passed, the (S4) auto clear processing execution time had passed and it distinguishes (S4:Y), auto clear processing is performed.
[0004] a setup used as the reference condition which records the status information which shows conditions, such as the present setup and a display, as auto clear processing on the Records Department which has (S5), and is beforehand recorded on the Records Department -- calling -- call appearance -- a setup is changed into reference condition the bottom (S6), and processing which makes auto clear processing an invalid (S7) is performed. And the processing after return is repeated to step S1.
[0005] the processing to the input received when it was judged in step S1 that alter operation is received (S1:Y) -- performing (S8) -- a time check after processing activation -- clear processing which returns the elapsed time clocked by the section to an initial state "0" is performed, (S9) and auto clear processing is confirmed (S10), and return and subsequent processings are repeated to step S1.
[0006] In step S2, when it is not an idle state (S2:N), it progresses to step S9 and subsequent processings are repeated.
[0007] In step S3, when the auto clear processing execution time had not passed and it distinguishes in step S4 when auto clear processing distinguishes that it is invalid (S3:N) or (S4:N), return and

subsequent processings are repeated to step S1.

[0008] By thus, the case where the user who used image formation equipment immediately before by performing auto clear processing has changed a setup When the next user uses it, operation mistakes, such as a mistake copy by operating image formation equipment by setup of the previous user, can be prevented. Moreover, while the manager who performs overhead operation, such as modification of the reference condition of image formation equipment, interrupted processing modification actuation and separated from image formation equipment, it is possible to prevent the operation mistake generated when different ordinary users from a manager operate it.

[0009] Moreover, it is also possible to perform return processing returned to the condition before calling a setup recorded on the Records Department at step S5 and performing auto clear processing, and these functions are shown to JP,10-143306,A and JP,11-45032,A by by performing predetermined return actuation.

[0010]

[Problem(s) to be Solved by the Invention] However, by performing actuation in_which of auto clear processing is performed with conventional image formation equipment as the manager is performing overhead operation, and ordinary users perform return processing after that, the condition in the middle of overhead operation is called, and since it will be in the condition that overhead operation which needs the input of the password which only a manager can originally know can be performed without entering a password, there is a problem about maintainability.

[0011] Although the approach that return processing is made not to perform to overhead operation is also considered in order to solve this problem By the case where the auto clear return processing to overhead operation is made not to be performed since, as for the overhead operation which a manager performs, a screen hierarchy needs deep complicated actuation compared with general actuation When auto clear processing is performed, overhead operation must be performed from the beginning and there is a problem on the working efficiency of taking time and effort. Since especially overhead operation is complicated and possibility that will operate it in many cases, checking an actuation document, therefore auto clear processing will be performed during the check of an actuation document is high, the problem about this working efficiency is hard to be disregarded.

[0012] In the return processing after making this invention in view of this situation and performing auto clear processing the condition before performing auto clear processing is overhead operation -- etc. -- the case where predetermined conditions are satisfied -- as long as -- by performing return check processing of the input request of a password etc. The repeat of the complicated activity by the operation mistake by ordinary users and the manager is prevented, and it aims at offer of the display which solves technical problems, such as a problem about maintainability, and a problem about working efficiency, and image formation equipment.

[0013]

[Means for Solving the Problem] In the display with which the display concerning the 1st invention performs auto clear processing in which the contents of a display are changed into the reference condition currently recorded beforehand after predetermined time progress, from the completion time of actuation A means to record the status information which shows the contents of a display before performing auto clear processing, A means by which status information distinguishes whether predetermined conditions are satisfied when the input returned to the contents of a display shown by the recorded status information is received after performing auto clear processing, When said predetermined conditions were satisfied and it distinguishes, before making it return to the contents of a display shown by status information, it is characterized by having a means to display the predetermined contents.

[0014] In the return processing after performing auto clear processing in the display concerning the 1st invention the conditions before performing auto clear processing are overhead operation, such as various setup, -- etc., since it can make it know that the condition of returning by displaying the predetermined contents of a display is overhead operation when satisfying predetermined conditions Since different ordinary users from a manager can prevent carrying out an operation mistake, maintainability is high, and since a return in the condition in the middle of actuation can be easily performed for a manager, it is

possible to raise working efficiency.

[0015] In the image formation equipment with which the image formation equipment concerning the 2nd invention performs auto clear processing in which a processing setup and the contents of a display are changed into the reference condition currently recorded beforehand after predetermined time progress, from the completion of actuation, or completion time of processing A means to record the status information which shows the condition of a processing setup and the contents of a display before performing auto clear processing, A means by which status information distinguishes whether predetermined conditions are satisfied when the input returned to a processing setup and the contents of a display which are shown by the recorded status information is received after performing auto clear processing, When [at which it distinguished] having satisfied said predetermined conditions, before making it return to a processing setup and the contents of a display which are shown by status information, it is characterized by having a means to perform predetermined return check processing.

[0016] In the return processing after performing auto clear processing with the image formation equipment concerning the 2nd invention the conditions before performing auto clear processing are overhead operation, such as various setup, -- etc. -- by performing return check processing of a display of the predetermined contents of a display etc., when satisfying predetermined conditions Since it can make it know that the condition of returning is overhead operation Since different ordinary users from a manager can prevent carrying out an operation mistake, maintainability is high, and for a manager, since a return in the condition in the middle of actuation can be performed easily, it is possible to raise working efficiency.

[0017] A means to by_which the image-formation equipment concerning the 3rd invention performs said return check processing in the 2nd invention carries out containing a means require the input of a sign train, a means collate the inputted sign train with the return sign train currently recorded beforehand, and a means end the processing concerned when the sign train and the return sign train inputted by collating are in agreement as the description.

[0018] Since the image formation equipment concerning the 3rd invention requires the input of return sign trains, such as a password which only a manager can know as return check processing, it is possible to prevent that the user who does not know a return sign train does an operation mistake.

[0019] A means by which the image formation equipment concerning the 4th invention performs said return check processing in the 2nd invention is characterized by including a means to require return actuation, and a means to end the processing concerned when the received actuation is predetermined return actuation.

[0020] Since the image formation equipment concerning the 4th invention requires predetermined return actuation of the key stroke which only a manager can know as return check processing, it is possible to prevent that the user who does not know return actuation does an operation mistake.

[0021]

[Embodiment of the Invention] Hereafter, this invention is explained in full detail based on the drawing in which the gestalt of the operation is shown. In addition, although the gestalt which applies the display of this invention to image formation equipment is explained henceforth, using a copying machine as image formation equipment of this invention, it is possible to apply to equipments, such as telephone which has a display as a display further, and audio equipment, to say nothing of not only a copying machine but a printer, facsimile apparatus, and these compound machines containing a copying machine being included as the display and image formation equipment of this invention.

[0022] Drawing 1 is the perspective view showing the appearance of the image formation equipment of this invention. One in drawing is image-formation equipment (display) of this invention which makes the shape of a rectangular parallelepiped, the manuscript base 2 is arranged in the upper part of image-formation equipment 1, a manuscript base 2 is equipped with the closing-motion lid 22 supported pivotably for nothing and an end in tabular [which has the installation tray 21 which lays the manuscript which should be copied], enabling free closing motion, and the glass side where the manuscript laid in the installation tray 21 with the closing-motion lid 22 is sent out is covered. Moreover, the control panel 3 which is an interface for operating image formation equipment 1 ahead of the manuscript base 2 in the

top face of image formation equipment 1 is arranged. And the sheet paper cassettes 4 and 4 and -- which hold the form of size different, respectively used as the copy place of an image in the lower part from CHUBU ENGINEERING CORPORATION of image formation equipment 1 are arranged. Furthermore, the discharge section 5 which discharges the form with which the image was copied is arranged in the left of image formation equipment 1.

[0023] Drawing 2 is the external view showing the control panel 3 with which the image formation equipment 1 of this invention is equipped. It has the touch panel liquid crystal display section (henceforth a LCD display) 31 which is an input/output interface equipped with the output function which displays the input function and image which receive the input of actuation by the depression in a finger near the center of a control panel 3. Image formation equipment 1 receives an input because a user does the depression of the part where an image with various images in which the image and alarm display for performing various processing setup to the LCD display 31 are shown is displayed, and is shown with the image currently displayed.

[0024] The clear key 34 to interrupt the clearance of the set point which the ten key 32 for inputting numeric values, such as the number of copies, is arranged by the method of the right of the LCD display 31, and the interrupt key 33 for interrupting the copy processing under activation temporarily and performing other copy processings is arranged in the method upper part of the right of a ten key 32, and is displayed on the LCD display 31 by the method lower part of the right of a ten key 32, and copy processing is arranged.

[0025] Furthermore all the discharge keys 35 for returning various setup of copy processing to the method of the right of an interrupt key 33 at a setup of reference condition are arranged, and the start key 36 for starting copy processing is arranged under all the discharge keys 35. And the image of reference condition displays from completion of the processing based on the input of the input by various key strokes to copy processing after predetermined-time progress etc., i.e., initiation of an idle state, on a LCD display 31 after predetermined-time progress, and after the auto clear processing returned to reference condition in various processing setup is performed by the method of the right of all the discharge keys 35, the carriage return 37 for making it return to the condition before auto clear processing is performed is arranged by it.

[0026] Moreover, in the image formation equipment 1 which is a compound machine, current, the copying machine (copy), the printer, and the LED display 38 that shows whether processing [which] of facsimile apparatus (facsimile) is performed are arranged in the left of the LCD display 31.

[0027] Drawing 3 is the block diagram showing the internal configuration of the image formation equipment 1 of this invention. Image formation equipment 1 the image shown in the manuscript sent out to the glass side of the manuscript base 2 By the image read station 41 read as analog image data, the A/D-conversion section 42 which changes into digital image data the analog image data which the image read station 41 read, and the A/D-conversion section 42 It has the section 45. the image-processing section 43 which performs various processings of gradation amendment etc. to the changed digital image data, the image formation section 44 which performs image formation (copy) processing based on the digital image data to which various processings were performed by the image-processing section 43, and the time check which clocks time amount -- These components make RAM47 memorize the various control programs recorded on the Records Department 46, such as a hard disk, and are controlled by performing by CPU48.

[0028] Moreover, various control programs are performed by CPU48 based on the received input by the LCD display 31, a ten key 32, an interrupt key 33, the clear key 34, all the discharge keys 35, the start key 36, and the I/O section 49 of carriage return 37 grade, and the I/O section 49 displays further the information which shows progress of processing by various control programs, and a result.

[0029] Next, it explains based on the drawing in which the image displayed on the LCD display 31 in the example of overhead operation, such as modification of reference condition made to the image formation equipment 1 of this invention, is shown. Drawing 4 thru/or drawing 9 are the explanatory views showing the image displayed on the image formation equipment 1 of this invention. Drawing 4 shows the image outputted when image formation equipment 1 is reference condition, the image in

which image formation equipment 1 is shown is displayed in the center, and the image for performing various setup, such as concentration, a form, and a scale factor, caudad is shown.

[0030] Drawing 5 is an image which requires the input of the sign train (password) displayed by performing the shift actuation 33 for shifting to the overhead operation condition for performing overhead operation from reference condition, for example, an interrupt key, and the coincidence depression of a clear key 34. Thus, a manager inputs a sign train to the sign train input request displayed by performing actuation for shifting, and overhead operation is permitted when the inputted sign train is a sign train of normal.

[0031] It is the image displayed when drawing 6 receives the input of the sign train of normal from the condition of drawing 5 and overhead operation is permitted. The overhead operation about a copy The overhead operation about the copy setting key 101 for carrying out, and a printer The list print key 104 for printing the total use number-of-sheets key 103 for checking the number of sheets of the print setting key 102 for carrying out and the image formation equipment 1 to current of operation and the item about overhead operation on a form is displayed. And the manager who performs overhead operation chooses the key which shows the function to set up, and does the depression of the selected key.

[0032] Drawing 7 is an image displayed when the copy setting key 101 is pressed from the condition of drawing 6 and it receives the overhead operation about a copy setup. A setup about the function of a copy In the department administration setting key 203 for changing a setup about department administration, such as management of the operating condition of the prohibition setting key 202 for changing a setup about prohibition and authorization of the use about the functional setting key 201 for changing, and various functions, and a user, and a list, the auto clear processing execution time And the time setting key 204 for changing a setup about time amount, such as transit time to low power mode, is displayed. And a manager chooses the key which shows the function to set up and does the depression of the selected key.

[0033] Drawing 8 is an image displayed when the functional setting key 201 is pressed from the condition of drawing 7 and it receives modification of a setup about a function. As the fixed scale-factor setting key 301 for setting up the scale factor used abundantly in addition to the fixed scale factor set up as initial setting, and elimination width of face of an elimination function the certified value setting key 302 of the elimination width of face for changing the certified value set up -- close and carry out -- a function should close and carry out -- as width of face close for changing the certified value set up and carry out -- the color-balance adjustment key 304 for changing adjustment of the certified value setting key 303 of width of face and a color-balance is displayed. And a manager chooses the key which shows the function to set up and does the depression of the selected key.

[0034] Drawing 9 is an image displayed when the certified value setting key 302 of elimination width of face is pressed from the condition of drawing 8 and it receives modification of a setup about the certified value of elimination width of face. In the left-hand side which lasts caudad from a center section The scrolling key 403 for enlarging the set point currently displayed on the frame deleting elimination width-of-face set point column 401 and the scrolling key 404 for making it small are displayed on the frame deleting elimination width-of-face set point column 401 which displays the current value of frame deleting elimination width of face, and the list. The scrolling key 406 for enlarging the set point currently displayed on the pin center,large elimination width-of-face set point column 405 and the scrolling key 407 for making it small are shown in the pin center,large elimination width-of-face set point column 405 which displays the current value of pin center,large elimination width of face, and the list by the right-hand side which lasts caudad from a center section. Moreover, modification of a setup about the O.K. key 408 for up registering the changed set point into the Records Department 46 and the certified value of elimination width of face is ended, the key 409 closed for returning to the screen before being shown in drawing 8 , and overhead operation are ended, and the end key 410 for returning to the screen in which the reference condition shown in drawing 4 is shown is displayed.

[0035] Next, it explains using the flow chart which shows auto clear processing of the image formation equipment 1 of this invention to drawing 10 . With image formation equipment 1, the existence of alter operation reception by the various keys which it has is detected (S101), when it is judged that alter

operation is not received, it detects whether it is in the standby condition of not processing (S101:N) and an idle state, i.e., image formation processing etc., (S102), and when it is an idle state, (S102:Y) and auto clear processing distinguish whether it is effective (S103). the case where auto clear processing distinguishes that it is effective in step S103 -- (S103:Y) and a time check -- when it distinguished whether the predetermined auto clear processing execution time always clocked by the section 45 would have passed (S104), the auto clear processing execution time had passed and it distinguishes (S104:Y), auto clear processing is performed.

[0036] a setup used as the reference condition which records the status information which shows conditions, such as the present setup and a display, on the Records Department 46 as auto clear processing (S105), and is beforehand recorded on the Records Department 46 -- calling -- call appearance -- a setup is changed into reference condition the bottom (S106), and processing which makes auto clear processing an invalid (S107) is performed. And the processing after return is repeated to step S101.

[0037] the processing to the input received when it was judged in step S101 that the alter operation by various keys is received (S101:Y) -- performing (S108) -- a time check after processing activation -- clear processing which returns the elapsed time clocked by the section 45 to an initial state "0" performs (S109), auto clear processing confirms (S110), and return and subsequent processings repeat to step S101.

[0038] In step S102, when it is not an idle state (S102:N), it progresses to step S109 and subsequent processings are repeated. In step S103, when the auto clear processing execution time had not passed and it distinguishes in step S104 when auto clear processing distinguishes that it is invalid (S103:N) or (S104:N), return and subsequent processings are repeated to step S101.

[0039] Next, three typical gestalten are shown about the return processing which returns from the auto clear processing in the image formation equipment 1 of this invention.
Gestalt 1. drawing 11 of operation is a flow chart which shows return processing of the gestalt 1 of the operation in the image formation equipment 1 of this invention. In the condition that the screen of the reference condition which auto clear processing is performed and is shown in drawing 4 is outputted with image formation equipment 1 It is supervising whether alter operation, such as a depression of various keys, was received (S201). It distinguishes whether when actuation is received (S201:Y), the received actuation is the depression of carriage return 37 (S202). When it judges that it is the depression of carriage return 37 (S202:Y), the status information recorded at step S105 in auto clear processing of drawing 10 is read in the Records Department 46 (S203). When it judges it whether the conditions before performing auto clear processing are whether predetermined conditions are satisfied and overhead operation to distinguish (S204) and to be overhead operation based on the read status information (S204:Y), return check processing is performed.

[0040] In order to make it check as return check processing to the user who pushed carriage return 37 first, the information which shows that the condition of returning is overhead operation is displayed on the LCD display 31 (S205). Drawing 12 is the explanatory view showing the image displayed on the image formation equipment 1 of this invention. The carriage return 501 which shows that **** which shows that the condition that you make it return is overhead operation is displayed on the LCD display 31, and return processing is continued as shown in drawing 12 , and the cancel key 502 which shows that return processing is stopped are displayed. And a user chooses carriage return 501 or a cancel key 502, and performs actuation which carries out the depression of the selected key.

[0041] With image formation equipment 1, it is supervising whether alter operation, such as a depression of carriage return 501 or a cancel key 502, was received (S206). It distinguishes whether when actuation is received (S206:Y), the received actuation is the depression of carriage return 501 (S207). When it judges that it is the depression of carriage return 501 (S207:Y), return check processing is ended (S208) and conditions, such as a setup and a display, are returned to the condition before auto clear processing activation based on the status information read in the Records Department 46 (S209).

[0042] In step S202, when it judges that the received actuation is actuation of those other than the depression of carriage return 37 (S202:N), processing based on the received actuation is performed

(S210), and return and subsequent processings are repeated to step S201.

[0043] In step S204, when it judges that the processing before performing auto clear processing is not overhead operation (S204:N), return check processing is not performed, but it progresses to step S209, and conditions, such as a setup and a display, are returned to the condition before auto clear processing activation based on the status information read in the Records Department 46 (S209).

[0044] In step S207, when it judges that the received actuation is actuation of those other than the depression of carriage return 501 (S207:N), return check processing is ended (S211), and after outputting the screen of the reference condition shown in return and drawing 4 to step S201, processing is repeated.

[0045] Thus, when the processing before performing auto clear processing by the case where carriage return 37 is pushed is overhead operation, generating of the operation mistake by the manager who is not asking for actuation of different ordinary users from a manager or overhead operation performing overhead operation is prevented by performing check processing which indicates that the processing before a return is overhead operation.

[0046] Gestalt 2. drawing 13 of operation is a flow chart which shows return processing of the gestalt 2 of the operation in the image formation equipment 1 of this invention. In the condition that the screen of the reference condition which auto clear processing is performed and is shown in drawing 4 is outputted with image formation equipment 1 When it supervised whether alter operation was received (S301) and actuation is received (S301:Y), It distinguishes whether the received actuation is the depression of carriage return 37 (S302). Status information is read in the Records Department 46 when it judges that it is the depression of carriage return 37 (S302:Y) (S303). When it judges it whether the condition before performing auto clear processing is overhead operation to distinguish (S304) and to be overhead operation based on the read status information (S304:Y), return check processing is performed.

[0047] The information which shows that it is shown that the condition of returning is overhead operation as return check processing, and the input of the sign train (password) for returning is required is displayed on the LCD display 31 (S305). Drawing 14 is the explanatory view showing the image displayed on the image formation equipment 1 of this invention. As shown in drawing 14 , it is shown that the condition that you make it return to the LCD display 31 is overhead operation, and **** which requires the input of a sign train is displayed, and the input column of a sign train is displayed.

[0048] When the existence of a sign train input was detected (S306) and the input of a sign train is received with image formation equipment 1 (S306:Y), The inputted sign train is collated with the return sign train currently recorded on the Records Department 46 (S307). When the sign train and return sign train which were inputted are in agreement as a result of collating (S308:Y), return check processing is ended (S309) and the condition of a setup and a display is returned to the condition before auto clear processing activation based on the status information read in the Records Department 46 (S310).

[0049] In step S302, when it judges that the received actuation is actuation of those other than the depression of carriage return 37 (S302:N), processing based on the received actuation is performed (S311), and return and subsequent processings are repeated to step S301.

[0050] In step S304, when it judges that the processing before performing auto clear processing is not overhead operation (S304:N), return check processing is not performed, but it progresses to step S310, and conditions, such as a setup and a display, are returned to the condition before auto clear processing activation based on the status information read in the Records Department 46 (S310).

[0051] When the input of a sign train is not being received in step S306 (S306:N), It distinguishes whether the predetermined time amount set up beforehand passed (S312). When it judges that predetermined time amount has not passed (S312:N), processing is repeated after returning to step S306. When it judges that predetermined time amount passed (S312:Y), it considers that the input of a sign train was not carried out, and return check processing is ended (S313), and processing is repeated after outputting the screen of the reference condition shown in return and drawing 4 to step S301.

[0052] In step S308, when the sign train and return sign train which were inputted are not in agreement as a result of collating (S308:N), it progresses to step S313 and subsequent processings are repeated.

[0053] Thus, by requiring the input of the return sign train which only a manager can know, it prevents

that the user who does not know a return sign train operates it.

[0054] Gestalt 3. drawing 15 of operation is a flow chart which shows return processing of the gestalt 3 of the operation in the image formation equipment 1 of this invention. In the condition that the screen of the reference condition which auto clear processing is performed and is shown in drawing 4 is outputted with image formation equipment 1 When it supervised whether alter operation was received (S401) and actuation is received (S401:Y), It distinguishes whether the received actuation is the depression of carriage return 37 (S402). Status information is read in the Records Department 46 when it judges that it is the depression of carriage return 37 (S402:Y) (S403). When it judges it whether the condition before performing auto clear processing is overhead operation to distinguish (S404) and to be overhead operation based on the read status information (S404:Y), return check processing is performed.

[0055] The information which shows that it is shown that the condition of returning is overhead operation as return check processing, and the input of the predetermined actuation for returning is required is displayed on the LCD display 31 (S405). Drawing 16 is the explanatory view showing the image displayed on the image formation equipment 1 of this invention. The manager to whom the predetermined actuation for **** which shows that the condition that you make it return is overhead operation being displayed on the LCD display, and making it return as shown in drawing 16 is connected beforehand recognizes that actuation of the coincidence depression of the return actuation 34 for making it return from displayed ****, for example, a clear key, and all the discharge keys 35 is demanded.

[0056] When the existence of actuation reception was detected (S406) and actuation is received with image formation equipment 1 (S406:Y), It distinguishes whether the received actuation is predetermined return actuation (S407). When it judges that the received actuation is predetermined return actuation (S407:Y), return check processing is ended (S408) and the condition of a setup and a display is returned to the condition before auto clear processing activation based on the status information read in the Records Department 46 (S409).

[0057] In step S402, when it judges that the received actuation is actuation of those other than the depression of carriage return 37 (S402:N), processing based on the received actuation is performed (S410), and return and subsequent processings are repeated to step S401.

[0058] In step S404, when it judges that the processing before performing auto clear processing is not overhead operation (S404:N), return check processing is not performed, but it progresses to step S409, and conditions, such as a setup and a display, are returned to the condition before auto clear processing activation based on the status information read in the Records Department 46 (S409).

[0059] When actuation is not being received in step S406 (S406:N), It distinguishes whether the predetermined time amount set up beforehand passed (S411). When it judges that predetermined time amount has not passed (S411:N), processing is repeated after returning to step S406. When it judges that predetermined time amount passed (S411:Y), it considers that return actuation was not performed and return check processing is ended (S412), and processing is repeated after outputting the screen of the reference condition shown in return and drawing 4 to step S401.

[0060] In step S407, when it judges that the received actuation is not predetermined return actuation (S407:N), it progresses to step S412 and subsequent processings are repeated.

[0061] Thus, by requiring return actuation in which only a manager can know, it prevents that the user who does not know return actuation operates it.

[0062] Although the gestalt of said operation showed the gestalt which performs the input or return actuation of a sign train as return check processing, it is [this invention] possible in carrying out various return check processings of the gestalt from which return actuation differs for every managers, such as an input of the gestalt which requires the both sides of the input of not only this but a sign train, and return actuation, and ID given only to the specific manager, at the gestalt require.

[0063]

[Effect of the Invention] With the display and image formation equipment which are applied to this invention as explained in full detail above In the return processing after performing auto clear processing in which a processing setup and the contents of a display are changed into the reference

condition currently recorded beforehand after predetermined time progress from the completion time of processing of the completion time of actuation, or image formation processing the conditions before performing auto clear processing are overhead operation, such as various setup, -- etc. -- the case where predetermined conditions are satisfied -- as long as -- By performing return check processing of presenting of the information which shows that the condition after a return is overhead operation, the input request of a password, predetermined return actuation, etc. since it can prevent that an operation mistake is performed by different ordinary users from a manager, maintainability is high, and for a manager, since a return in the condition in the middle of actuation can be performed easily, it is possible to raise working efficiency -- etc. -- the outstanding effectiveness is done so.

[Translation done.]